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EXAMINER

IRSHADULLAH, M

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 09/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/721,141

Applicant(s)

MAHAPATRO, NEELAMADHABA

Examiner

M. Irshadullah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This communication is in response to amendments filed July 23, 2002.

Summary Of Instant Office Action

2. Applicant's arguments concerning claims 26, 29-34 rejections under 35 USC 102, para 11, and claims 27, 28 and 35 rejections under 35 USC 103, para 13, Paper No. 6, Office Action, mailed December 28, 2001 are moot in view of cancellation of the claims.
3. Amend to specification has been entered.
4. In view of cancellation of claims 26-35, claim rejections under 35 USC 112, first paragraph and second paragraph have withdrawn.
5. Claims 26-35 have been canceled and new claims 40-49 been entered.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

7. Claims 40, 43-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Hughes et al (US Patent 5,893,074).

Hughes et al disclose:

Claim 40. (Newly Submitted) A method for generating a plurality of individually schedulable assignments for a task, based upon task constraints associated with said task, said task constraints identifying N resources assigned to said task where N is a positive integer, and a required work-amount corresponding to each of said N resources [Title, Abstract, lines 1-2, col 3, lines 29, 40-43], steps comprising the steps of:

a) dividing said task into N assignments, said task comprising an amount of work, each assignment comprising a portion of the work that corresponds with an individual resource (Abstract, lines 6-8, col 2, lines 10-11, col 4, lines 30-31, Fig. 1 (10, 14a-d, 15a-d), col 5, lines 9-11, col 6, lines 19, 20, 21 and 22 recited with col 3, lines 29, 40-43, 22-25 (specifically line 25). Applicant will appreciate that “work” would encompass “project”, “tasks” or both);

b) associating each of said N assignments with one of said N resources, each resource comprising one of an non-human and human object capable of performing an assignment (Col 6, lines 19, 20, 21, 22, fig. 1 (10, 14a-d, 15a-d), col 2, lines 3-7, 26-30, col 3, lines 22-25, 36-37, 40-45 read with col 1, lines 42-47. Applicant will appreciate that customarily/practically all personnel and equipment/machines/computers, area/space (human and nonhuman resources)

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would be included/assigned in/to the project only for their qualification/capability to performing the job/work/project/task/assignment);

c) for each assignment, identifying the task, corresponding individual resource, and one of the portion of work corresponding to a respective resource and a duration of the assignment (Fig. 1 (15a-d), col 2, line 35, col 6, line 17 and Fig. 1 (14a-d), col 5, lines 11-12, 46-50, 63-64, col 3, lines 29, 40-43, col 4, line 61 through col 5, line 2, and col 11, lines 44-47); and

d) generating a list comprising the N assignments (Abstract, lines 16-18, col 10, lines 15-17 and 7-10. Applicant will appreciate that “product” enshrines project(s), larger tasks (14a-d, Fig. 1), smaller tasks/assignments (15a-d, Fig. 1) or all of them).

Claim 43. (Newly Submitted) A computer-readable medium on which is stored a computer program for generating a plurality of schedulable assignments for a task (Fig. 5 described col 11, lines 9-32 (specifically lines 17-19), Title, Abstract, lines 1-2, col 3, lines 29, 40-43), said program performing the steps comprising:

a) receiving a task description for said task, said task description identifying N resources assigned to said task where N is a positive integer, said task comprising an amount of work, a required work-amount corresponding to each of said N resources, and one or more scheduling constraints for said task (Col 2, lines 17-19, col 5, lines 30-32 recited with col 5, lines 10-13, 46-50, col 11, lines 44-47);

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b) dividing said task into N assignments, each of said N assignments identifying one of said N resources, each assignment comprising a portion of the work that corresponds with an individual resource, each resource comprising one of an non-human and human object capable of performing an assignment (Abstract, lines 6-8, col 2, lines 10-11, col 4, lines 30-31, Fig. 1 (10, 14a-d, 15a-d), col 5, lines 9-11, col 6, lines 19, 20, 21 and 22 recited with col 3, lines 29, 40-43, 22-25 (specifically line 25). Applicant will appreciate that “work” would encompass “project”, “tasks” or both, col 2, lines 3-7, 26-30, col 3, lines 22-25, 36-37, 40-45 recited with col 1, lines 42-47 and explanation in Applicant’s claim 40b above);

c) for each assignment, identifying the task, corresponding individual resource, and one of the portion of work corresponding to a respective resource and a duration of the assignment (Fig. 1 (15a-d), col 2, line 35, col 6, line 17 and Fig. 1 (14a-d), col 5, lines 11-12, 46-50, 63-64, col 3, lines 29, 40-43, col 4, line 61 through col 5, line 2, and col 11, lines 44-47);

d) associating each of said N assignments with said scheduling constraints for said task (Col 6, lines 19, 20, 21, 22, Fig. 1 (10, 14a-d, 15a-d)); and

e) generating a list comprising the N assignments (Abstract, lines 16-18, col 10, lines 15-17 and 7-10. Applicant will appreciate that “product” enshrines project(s), larger tasks (14a-d, Fig. 1), smaller tasks/assignments (15a-d, Fig. 1) or all of them).

Claim 44. (Newly Submitted) A computer system for generating assignments for a task, comprising:

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- a) a processing unit (Fig 1 (20));
- b) a memory storage device (Fig. 1 (18));
- c) a program module, stored in the memory storage device for providing instructions to the processing unit (Fig. 1, col 5, lines 16-26 (specifically lines 24-26));
- d) the processing unit, responsive to the instructions of the program module (Fig. 1 (20), col 5, lines 4-6, 16-32), operative to:
 - e) receive a task description for the task, the task description identifying N resources assigned to the task where N is a positive integer, said task comprising an amount of work (Col 2, lines 17-19, col 5, lines 30-32 recited with col 5, lines 10-13, 46-50, col 11, lines 44-47);
 - f) divide the task into N assignments, each of the N assignments identifying one of the N resources, each assignment comprising a portion of the work that corresponds with an individual resource, each resource comprising one of an non-human and human object capable of performing an assignment (Abstract, lines 6-8, col 2, lines 10-11, col 4, lines 30-31, Fig. 1 (10, 14a-d, 15a-d), col 5, lines 9-11, col 6, lines 19, 20, 21 and 22 recited with col 3, lines 29, 40-43, 22-25 (specifically line 25). Applicant will appreciate that “work” would encompass “project”, “tasks” or both, col 2, lines 3-7, 26-30, col 3, lines 22-25, 36-37, 40-45 recited with col 1, lines 42-47 and explanation in Applicant’s claim 40b above);
 - g) for each assignment, identify the task, corresponding individual resource, and one of the portion of work corresponding to a respective resource and a duration of the assignment (Fig.

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1 (15a-d), col 2, line 35, col 6, line 17 and Fig. 1 (14a-d), col 5, lines 11-12, 46-50, 63-64, col 3, lines 29, 40-43, col 4, line 61 through col 5, line 2, and col 11, lines 44-47);

h) associate each of said N assignments with said scheduling constraints for said task (Col 6, lines 19, 20, 21, 22, Fig. 1 (10, 14a-d, 15a-d)); and

I) generate a list comprising the N assignments (Abstract, lines 16-18, col 10, lines 15-17 and 7-10. Applicant will appreciate that “product” enshrines project(s), larger tasks (14a-d, Fig. 1), smaller tasks/assignments (15a-d, Fig. 1) or all of them).

Claim 45. (Newly Submitted) The computer system of Claim 44, wherein the processing unit is further operative to set a work-amount for each of the N assignments to the total amount of required work divided by N (Inherent, since breaking a project/task into an equal number of components/tasks/assignments one has to divide by a number, say N).

Claim 46. (Newly Submitted) The computer system of Claim 44, wherein the task description includes an assignment limit for at least one of the N resources, and the processing unit is further operative to set a work amount for each of the N assignments in accordance with the assignment limits and in a manner that the summation of all of the work-amounts is equal to the total amount of required work (Col 2, lines 5-25, claim 8 read with col 13, lines 1-11 (specifically lines 1-4, 5-8)).

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Claim 47. (Newly Submitted) The computer system of Claim 44, wherein the task description includes one or more scheduling constraints for the task, and the processing unit is further operative to set a work-amount for each of the N assignments as a function of the scheduling constraints and in a manner that the summation of all of the work-amounts is equal to the total amount of required work (Col 11, lines 40-44 (specifically lines 43-44), lines 44-47, claim 8 recited with col 13, lines 1-11 (specifically lines 1-4, 5- 8)).

Claim 48. (Newly Submitted) The computer system of Claim 44, wherein the task description includes one or more scheduling constraints for the task, and the processing unit is further operative to associate each of the N assignments with the scheduling constraints (Col 11, lines 40-44 (specifically lines 43-44), lines 44-47, col 6, lines 19, 20, 21 and 22 read with col 5, lines 9-13 and 46-50).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 41, 42 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al (US Patent 5,893,074) in view of Deziel, Jr. et al (US Patent 5,406,476).

In the following claim Hughes et al do not explicitly show the recited features:

Claim 41. (Newly Submitted) The method of Claim 40, wherein said task constraints identify one or more scheduling constraints and further comprising the step of associating each of said N assignments with said scheduling constraints.

However, Deziel et al teach the same (Title, Abstract, lines 3-7, col 1, lines 12-15, Figs. 3a and 3c described col 9, lines 46-68 continue col 10, lines 1-28 and 29-43).

It would have been obvious to one of ordinary skill in the project/task/assignment scheduling to incorporate Deziel et al's features into Hughes et al's invention, because it would provide an efficient method for scheduling resources amongst the various activities in light of the attendant resource and activity constraints.

In the following claim: the claimed feature, however, Deziel et al teach the same:

Claim 42. (Newly Submitted) The method of Claim 40, wherein said task constraints identify one or more scheduling constraints and further comprising the step of associating each of said N assignments with said task being divided (Deziel et al: Title, Abstract, lines 3-7, col 1, lines 12-15, Figs. 3a and 3c described col 9, lines 46-68 continue col 10, lines 1-28 and 29-43 and Hughes et al: Fig. 1 (10, 15a-d, 14a-d)).

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Hughes et al show:

divided tasks (tasks being divided) Fig. 1 (10, 15a-d, 14a-d), yet do not show;

task constraints identify one or more scheduling constraints and further comprising the step of associating each of said N assignments.

However, Deziel et al teach the same (Title, Abstract, lines 3-7, col 1, lines 12-15, Figs. 3a and 3c described col 9, lines 46-68 continue col 10, lines 1-28 and 29-43).

It would have been obvious to one of ordinary skill in the relevant art at the time of instant invention to incorporate Deziel et al's features into Hughes et al's invention, because identification of a constraint to be used and associated with a task is the integral part of task scheduling process.

Claim 49. (Newly Submitted) The computer system of Claim 44, wherein the task description includes one or more scheduling constraints for the task (Hughes et al: Col 11, lines 40-44 (specifically lines 43-44), lines 44-47), and the processing unit (Fig. 1 (20)) is further operative to:

associate each of the N assignments with the scheduling constraints (Hughes et al: Col 6, lines 19, 20, 21 and 22 and col 11, lines 44-47); and

In the undernoted element, Hughes et al do not show the following feature:

assign a priority to each of the assignments as a function of the scheduling constraints.

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However Deziel et al teach the same (Abstract, line 6, col 8, lines 39-44 and discussion of Applicant's claim 41 above).

It would have been obvious to one of ordinary skill in the relevant art at the time of instant invention to incorporate Deziel et al's feature into Hughes et al's invention, because assigning a priority would determine the order in which the task (assignment) be scheduled and done.

Response to Arguments

14. Applicant's arguments filed July 23, 2002 are moot in view of cancellation of the claims.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Irshadullah whose telephone number is (703) 308-6683. The examiner can normally be reached, M-F from 11:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor , Tariq Hafiz, can be reached on (703) 305-9643. The fax numbers for the organization are (703) 305-0040/308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-3900.



M. Irshadullah

September 26, 2002



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